Amendments to the Claims:

Please amend Claims 24 and 33 as indicated in the following listing of claims, which replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. – 23. (Canceled).

24. (Currently Amended) A method for identifying an individual, the method comprising:

applying an incident optical spectral distribution to subepidermal tissue of the individual;

measuring a response optical spectral distribution emanating from the subepidermal tissue;

deriving a difference optical spectral distribution by performing a mathematical operation on the response optical spectral distribution and a reference optical spectral distribution; and

determining whether characteristics of the difference optical spectral distribution are consistent with the individual being a person associated with the reference optical spectral distribution, wherein determining whether characteristics of the difference optical spectral distribution are consistent with the individual being a person associated with the reference optical spectral distribution comprises analyzing the difference optical spectral distribution with a database having a plurality of difference spectra.

25. (Previously Presented) The method recited in claim 24 wherein the deriving and determining steps are performed for a plurality of reference optical spectral distributions, each of which is associated with a different person, whereby a determination is made whether the individual is one of a set of persons.

26. (Previously Presented) The method recited in claim 24 wherein the deriving and determining steps are performed for a single reference optical spectral distribution associated with a purported identity of the individual, whereby a determination is made whether the individual has the purported identity.

27. (Previously Presented) The method recited in claim 24 wherein the mathematical operation comprises calculation of a difference between the response optical spectral distribution and the reference optical spectral distribution.

28. (Previously Presented) The method recited in claim 24 wherein the mathematical operation comprises calculation of a ratio between the response optical spectral distribution and the reference optical spectral distribution.

29. (Previously Presented) The method recited in claim 24 wherein the database has a plurality of intra-person difference spectra for a person associated with the reference optical spectral distribution.

30. (Previously Presented) The method recited in claim 24 wherein the database has a plurality of inter-person difference spectra.

31. (Previously Presented) The method recited in claim 24 wherein a plurality of intra-person and inter-person difference spectra.

32. (Previously Presented) The method recited in claim 24 wherein determining whether characteristics of the difference optical spectral distribution are consistent with the individual being a person associated with the reference optical spectral distribution comprises performing a discriminate analysis to compare underlying spectral shapes of the difference optical spectral distribution with the reference optical spectral distribution.

33. (Currently Amended) A system for identifying an individual, the system comprising:

an optical source adapted to apply an incident optical spectral distribution to subepidermal tissue of the individual;

a spectrometer adapted to measure a response optical spectral distribution emanating from the subepidermal tissue; and

a computational device in communication with the spectrometer and having a program with computer-readable instructions for:

deriving a difference optical spectral distribution by performing a mathematical operation on the response optical spectral distribution and a reference optical spectral distribution; and

determining whether characteristics of the difference optical spectral distribution are consistent with the individual being a person associated with the reference optical spectral distribution, wherein the instructions for determining whether characteristics of the difference optical spectral distribution are consistent with the individual being a person associated with the reference optical spectral distribution comprise instructions for analyzing the difference optical spectral distribution with a database having a plurality of intra-person difference spectra.

34. (Previously Presented) The system recited in claim 33 wherein the instructions for deriving and determining are executed for a plurality of reference optical spectral distributions, each of which is associated with a different person, whereby a determination is made whether the individual is one of a set of persons.

35. (Previously Presented) The system recited in claim 33 wherein the instructions for deriving and determining are executed for a single reference optical spectral distribution associated with a purported identity of the individual, whereby a determination is made whether the individual has the purported identity.

36. (Previously Presented) The system recited in claim 33 wherein the mathematical operation comprises calculation of a difference between the response optical spectral distribution and the reference optical spectral distribution.

37. (Previously Presented) The system recited in claim 33 wherein the mathematical operation comprises calculation of a ratio between the response optical spectral distribution and the reference optical spectral distribution.

38. (Previously Presented) The system recited in claim 33 wherein the database has a plurality of intra-person difference spectra for a person associated with the reference optical spectral distribution.

39. (Previously Presented) The system recited in claim 33 wherein the database has a plurality of inter-person difference spectra.

40. (Previously Presented) The system recited in claim 33 wherein the-database has a plurality of intra-person and inter-person difference spectra.

41. (Previously Presented) The system recited in claim 33 wherein the instructions for determining whether characteristics of the difference optical spectral distribution are consistent with the individual being a person associated with the reference optical spectral distribution comprise instructions for performing a discriminate analysis to compare underlying spectral shapes of the difference optical spectral distribution with the reference optical spectral distribution.